



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,829	12/16/2003	Akihiro Miyazaki	2003_1819	5480
513 7590 01/24/2008 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			EXAMINER TSEGAYE, SABA	
			ART UNIT 2619	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/735,829

Applicant(s)

MIYAZAKI ET AL.

Examiner

Saba Tsegaye

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 53-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 53-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:12/16/03;04/28/04; 03/07/05; 05/05/05; & 11/15/07.

DETAILED ACTION

ABSTRACT

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

TITLE

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 55, 56, 59, 60, 63, 64, 67 and 68 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 55, line 4; claim 56, line 2; claim 59, line 4; claim 60, line 2; claim 63, line 5; claim 64, line 3; claim 67, line 4; and claim 68, line 2, the phrase "the frequency" lacks antecedence basis.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 53, 54, 61, 62, 57, 58, 65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell et al. (6,032,197) in view of Arai (US 6,330,695 B1).

Regarding claim 53, 57 and 61, Birdwell discloses a data transmission method for sequentially transmitting data in packet units each containing transmission data from a transmitting end to a receiving end, said method comprising.

transmitting an uncompressed packet in which predetermined transmission data is stored as uncompressed data; subsequently continuously transmitting compressed packets in which at least a portion of transmission data following the predetermined transmission data is compressed and stored as compressed data (column 9, lines 8-23; fig. 8); and

forming compressed data, via a first compression process, that is to be stored in any packet other than the uncompressed packet, based on transmission data of the uncompressed packet and transmission data of the packet to be compressed (column 9, lines 8-23; fig. 8).

Birdwell fail to disclose a second compression process and switching between the first and the second compression processes.

Arai teaches data communications apparatus that comprises a plurality of compression coding schemes so that an optimum scheme may be selected for each of the recording/reproduction operation (column 11, lines 29-41). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to add a second compression process, such as that suggested by Arai, to the system of Birdwell in order to improve overall system performance.

Regarding claims 54, 58 and 62, Arai discloses an error detection coding circuit that is used commonly between a plurality of different signal processing so that the error-detection capability in the error-detection coding is set to be different to the information data processed and output in the signal processing (column 11, lines 16-25).

Regarding claim 65, Birdwell discloses a data reception apparatus for receiving data that is transmitted in packet units from a transmitting end, said apparatus comprising:

a reception unit (client; fig. 6) operable to receive an uncompressed packet in which predetermined transmission data is stored as uncompressed data, and then to continuously receive compressed packets in which at least a portion of transmission data following the predetermined transmission data is compressed and stored as compressed data (column 7, lines 15-37; column 9, lines 55-60); and

a restoration unit operable to perform a first restoration process of restoring transmission data of a compressed packet to be restored, based on transmission data of the uncompressed packet and compressed data included in the compressed packet to be restored (column 7, lines 38-51; column 9, lines 61-67).

Birdwell fail to disclose a second restoration process and switching between the first and the second restoration processes.

Arai teaches data communications apparatus that comprises a plurality of compression coding schemes so that an optimum scheme may be selected for each of the recording/reproduction operation (column 11, lines 29-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a second restoration process and switching between the first and second restoration process, such as that suggested by Arai, to the system of Birdwell in order to improve overall system performance.

Regarding claim 66, Arai discloses the data reception apparatus wherein the restoration switches between the first and the second restoration processes according to a restoration error occurrence of the compressed packet, thereby performing either of the first or the second restoration process (column 11, lines 16-25).

Allowable Subject Matter

7. Claims 55, 56, 63, 64, 59, 60 and 68 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cellier et al. (US 5,884,269) discloses a lossless compression/decompression of digital audio data.

Geiger (US 5,701,302) discloses a method and apparatus for adaptively companding data packets in a data communication system.

Application/Control Number:
10/735,829
Art Unit: 2619

Page 6

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Saba Tsegaye
Examiner
Art Unit 2619

ST
January 21, 2008


WING CHAN
1/22/08
SUPERVISORY PATENT EXAMINER